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CLAIMS

1. An electrical motor which comprises:

a current input lead;

a first conductive coil;

a first magnet; and

a commutator for alternately energizing said first coil according to a relative position between said first coil and said magnet, wherein said commutator comprises said first photoresistor wired in series between said lead and said first coil.

2. The motor of Claim 1 which further comprises a movable armature for allowing a change in relative position between said first coil and said magnet.

3. The motor of Claim 2, wherein said device further comprises a light shutter for alternately exposing said first photoresistor to a light source in association with a position of said armature.

4. The motor of Claim 3, wherein said light source is an ambient light source.

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5. The motor of Claim 1, wherein said magnet is a permanent magnet.

6. The motor of Claim 1, which further comprises:

a second conductive coil; and,

said comutator further comprises a second photoresistor wired in series between said lead and said second coil.

7. The motor of Claim 6, which further comprises:

a third conductive coil; and,

said comutator further comprises a third photoresistor wired in series between said lead and said third coil.

8. The motor of Claim 1, wherein said first photoresistor is further wired through a voltage divider.

9. The motor of Claim 3, which further comprises a first shunting photoresistor wired to said first coil to reduce the current in said first coil while said first photoresistor is shaded by said shutter, and said first shunting photoresistor is illuminated by said shutter.

10. A motorized device which comprises:

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a current source; and,  
an electrical motor for driving said device, wherein  
said motor comprises:

a first conductive coil;  
a first magnet; and  
a commutator for alternately energizing said first  
coil, wherein said commutator comprises said first  
photoresistor being wired in series between said current  
source and said first coil.

11. The device of Claim 10, which further comprises a  
movable armature for allowing a change in relative position  
between said first coil and said first magnet.

12. The device of Claim 11, which further comprises a light  
shutter for alternately exposing said first photoresistor to  
a light source depending on the position of said armature.

13. The device of Claim 12, wherein said current source  
comprises a photovoltaic cell.

14. The device of Claim 13, wherein said light source  
powers said cell.

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15. A commutator for an electric motor having a current lead, at least one conductive coil and at least one magnet, said commutator comprises:

a photoresistor wired in series between said lead and said coil; and,

means for alternately exposing and shading said photoresistor to a light source at specified relative positions between said coil and said magnet, thereby controlling the current through said coil.

16. The commutator of Claim 15, wherein said means for alternately exposing and shading comprise a shutter assembly.

17. An electric motor which comprises:

a current input lead;

a first coil;

a first photoresistor connected in series between said coil and said lead; and

a shutter formed between said first photoresistor and a light source, whereby said first coil is energized when said shutter is open.